



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/973,553	10/09/2001	David H. Blount		7883
7590	01/21/2004			
David H. Blount 6728 Del Cerro Blvd. San Diego, CA 92120			EXAMINER YOON, TAE H	
			ART UNIT 1714	PAPER NUMBER

DATE MAILED: 01/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/973,553	BLOUNT, DAVID H. 
	Examiner	Art Unit
	Tae H Yoon	1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## ***Office Action Summary***

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

1)  Responsive to communication(s) filed on \_\_\_\_\_.  
2a)  This action is **FINAL**.                    2b)  This action is non-final.  
3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1-20 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-20 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)  All b)  Some \* c)  None of:

1.  Certified copies of the priority documents have been received.
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

13)  Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a)  The translation of the foreign language provisional application has been received.

14)  Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_  
4)  Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_\_

The diisocyanate formula recited in page 10 is incorrect.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 14 is rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the positive presence of component b, does not reasonably provide enablement for the absence of component b. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims.

The recited polyurethane cannot be obtained from a composition having no organic compound with one or more active hydrogen (component b).

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 5 recite mixing, heating and reaction, but they also recite the amount of components C, D and E being 0 part by weight. Thus, it is confusing with respect to its metes and bounds.

The recited "derivatives" in claim 4 is indefinite absent particular functional groups or substituents, and the recited "oxides, carbonates, sulphates, phosphates and borates" in claim 4 are indefinite in not specifying a particular counterpart such as metal or organic specie. Improper Markush language is recited in claim 12, and cancellation of "and" after "polyacetal," is needed. Also, cancellation of "as produced in claim 1" in lines 4-5 of claim 14 and "of claim 1" in line 2 of claim 18 is needed.

The recited "unsaturated polyester resin containing a peroxide catalyst thereby producing a flame retarded polyester resin (concrete)" in claims 15 and 16 are confusing since it is unclear whether said flame retarded polyester resin is cured (or crosslinked) or not. Claims 17 and 19 are indefinite since it is unclear whether the recited "heating until mixture is dry" also yield a reaction of components or not absent a particular temperature since simple heating at 50°C would not yield the recited urea-urea condensate-sewer sludge. The recited preambles, "The aldehyde-urea-urea condensate-sewer sludge" of claim 9 and "The flammable organic material" of claims 12 and 14-16", lack an antecedent basis and they should be "The urea-urea condensate-sewer sludge" instead.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, 8, 9, 11, 13, 17, 19 and 20 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Karnemaat (US 3,713,800).

Karnemaat teaches the instant urea-urea condensate-sewer sludge composition and the method of making thereof at col. 2, lines 43-68 and in examples and claims. The sewer sludge having water content of about 3 wt.% meets the instant wet sewer sludge absent a particular weight of water. The sewer of Karnemaat inherently contains sulfur containing compounds which react with the urea and/ or urea condensate. Thus, the instant invention lacks novelty.

Claims 1-6, 8, 9, 11, 13, 17, 19 and 20 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Moore (US 4,519,831).

Moore teaches the instant urea- urea condensate-sewer sludge composition and the method of making thereof in examples and claims. The sewer sludge having water content of about 3.5 wt.% of example 1 or about 10 wt.% (col. 4, lines 55-56) meets the instant wet sewer sludge absent a particular weight of water. The sewer of Moore contains sulfur-containing compound as evidenced by the table at col. 6 and said sulfur-

containing compound reacts with the urea and/ or urea condensate. Thus, the instant invention lacks novelty.

Claims 7, 10, 12, 14, 15, 16 and 18 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, first and second paragraph, set forth in this Office action, and if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Allan (US 5,022,917) teach employing potassium dihydrogen phosphate as a nitrogen source at col. 12, lines 25-37, but fails to teach or suggest any reaction of said potassium dihydrogen phosphate with other components. Blount (US 5,854,309) teaches the use of the reaction product of urea and a nitrogen containing compound as a flame retardant for flammable organic materials, but fails to teach or suggest the use of sewer sludge which contains various components including nitrogen and sulfur containing compounds as a nitrogen containing compound.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tae H Yoon whose telephone number is (571) 272-1128. The examiner can normally be reached on Mon-Thu.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone

number for the organization where this application or proceeding is assigned is (703)  
872-9306.

Any inquiry of a general nature or relating to the status of this application or  
proceeding should be directed to the receptionist whose telephone number is (703) 308-  
0661.

  
Tae H Yoon  
Primary Examiner  
Art Unit 1714

THY/January 8, 2004